

THE CELLULOID LETTER  
COMPANY

32 LIBERTY ST. NEW YORK

Sole Manufacturers of

WHITE & COLORED LETTERS  
& NUMBERS FOR SIGNS



# CELLULOID LETTER COMPANY.



**S**IGN letters of Celluloid are a use for that material recently discovered. This Company was organized scarcely two years ago for the manufacture of street numbers, letters for windows and indoor signs, and for the general adaptation of Celluloid to sign purposes. Popular taste in signs has experienced great change within a generation, and that change has been for the better. People are no longer content with a coarsely lettered announcement of their names and business, but they seek neat work and tasteful designs wherewith to apprise the public of their vocations.

The Letter Company found an excellent field for development. It has established a large trade that shows steady growth. Wherever Celluloid letters have been introduced, every customer secured has been the means of bringing orders from others. These letters combine all the qualities most desirable in signs. They are reasonable in cost, they are legible, they are practically indestructible, they are unaffected by extremes of temperature, and they do not crack or warp from their fastenings. If their base be broken, as often happens with windows, the letters remain uninjured where letters of glass would share the general ruin. Besides these characteristics there is a uniform-



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LIBRARY

Celluloid



A-214

Baldwin & Gleason N.Y.

COMPLIMENTS OF  
THE CELLULOID MANUFACTURING CO.,  
NEWARK, N. J.







CELLULOID.









# The Celluloid Industries

CELLULOID

SOME INFORMATION

REGARDING ITS

MANUFACTURE

and the

ARTICLES MADE

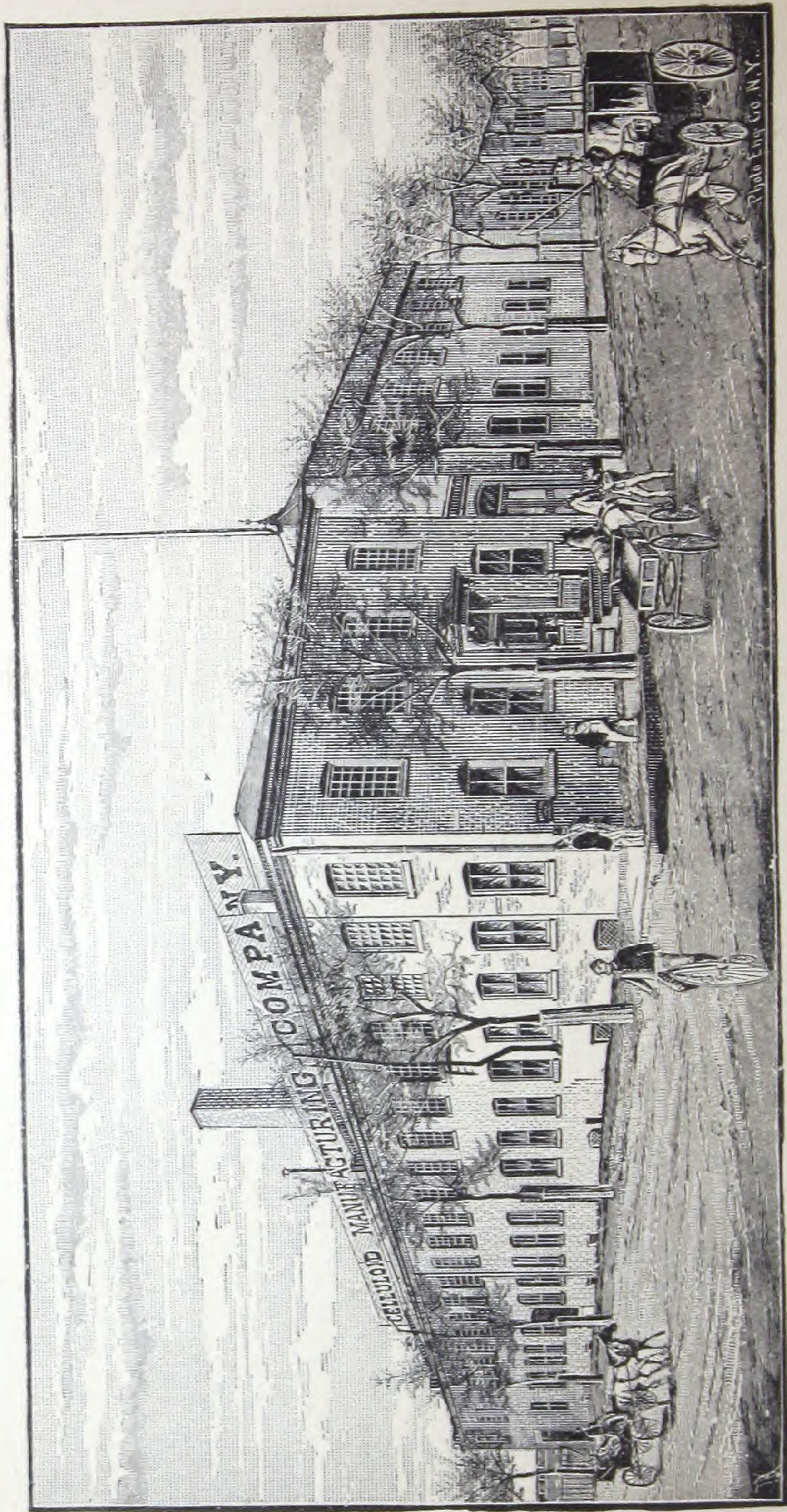
FROM IT.

Compliments  
of

Celluloid Manufacturing Co.

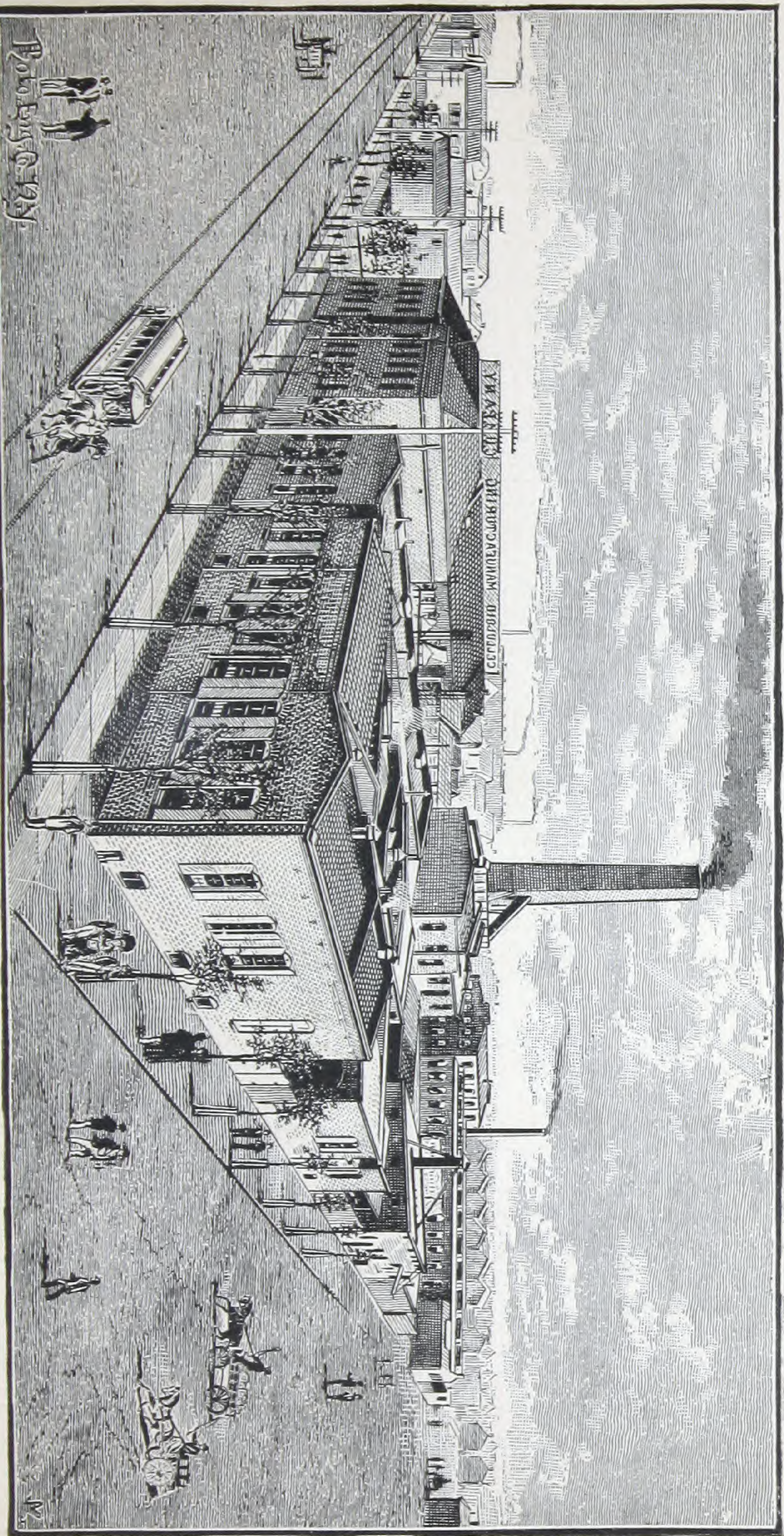
1885.





THE CELLULOID MANUFACTURING CO. Front View of Factory, NEWARK, N. J.





Robt. Eng. & Co. N.Y.

THE COTTON AND MANUFACTURING CO. DOW VIEW OF ENTONS







THE  
CELLULOID MANUFACTURING CO.



THE name CELLULOID was coined by its inventors as descriptive of their finished product, and has been patented by this company as its trade-mark. It is derived from "Cellulose," and signifies the woody fibre contained in all such vegetable structures as cotton, flax and hemp.

CELLULOID is made from pure "Cellulose," preferably cotton fibre or flax, or a mixture of the two. This fibre is treated to a bath of mixed nitric and sulphuric acids, in which it undergoes a chemical change, and is converted into what is technically termed "nitro-cellulose," which is capable of being dissolved by such agents as ether, alcohol and camphor, or their mixtures. The acids are then thoroughly washed out and neutralized, the fibre is dried, ground up and mixed with the selected solvents and such coloring matter as may be necessary to produce the desired result. It is next ground or masticated in heated rollers, the heat completes the process, and it comes out a tough solid mass, resembling somewhat in texture and pliability a piece of wet sole leather. It is now ready to be formed into the various shapes in which it is sold to our customers, such



as sheets of all sizes and thicknesses, varying from  $\frac{1}{1000}$  of an inch to three inches, and rods and tubes varying from the size of a fine thread up to three or four inches in diameter.

A nitro-cellulose material under different names and forms has been before the public for many years in liquid shape. It is known in the medical profession as "liquid cuticle," and is used to form an artificial skin or film over wounds, to exclude the air. It is also used by photographers to coat their negatives or glass plates, and many attempts have been made, both here and abroad, to produce it in a solid and useful form, such as CELLULOID now is. It was, however, reserved for the Messrs. HYATT, then residing in Albany, N. Y., to invent the processes required to effect this end. These processes were patented by them and were followed by still further improvements and patents, all owned by this company, until we now have about 150 patents, controlling the manufacture and machinery.

CELLULOID as a new material in the arts, dates back to about 1870. It is a hard, durable, thoroughly homogeneous material, plastic under heat or capable of being molded in proper dies, and susceptible of a fine finish and beautiful polish. It can be readily turned in a lathe, and carved or cut with common tools. It is unchangeable under ordinary atmospheric conditions, almost entirely unaffected by acids or alkalies, tough as whalebone, elastic and dense as ivory.



Nearly colorless in its original condition, it may be readily colored by the addition of pigment to any desired shade, and so perfectly made in imitation of ivory, tortoise shell, amber, coral, agate, cornelian and precious marbles, that it can hardly be distinguished from them by an expert. Even the fine veins or grain which are found in natural ivory are reproduced, as well as the translucent or semi-opaque strata which are seen in agates and rare marbles.

As with nearly all discoveries of importance, the first years of CELLULOID were filled with disappointments. Many unforeseen difficulties had to be overcome, there were machinery and processes to be invented, and a market found for the material. Experience, combined with perseverance and a large outlay of capital, has overcome all these obstacles. CELLULOID, as perfected, produced and sold for the past ten years, is of uniform consistency, a complete product, and is applied to a large and constantly increasing number of useful articles.

The only manufacturer of CELLULOID in this country is the CELLULOID MANUFACTURING COMPANY, a corporation organized under the laws of the State of New York in 1871. Its factories are established in Newark, where they cover an entire block of ground, 200 feet front by 325 feet deep, together with an annex of a half block of 100 feet front and 260 feet deep. Views of them are given in the accompanying pages.



As we are constantly in receipt of letters to the general effect that the writers are working on some new application of CELLULOID, and asking for samples and prices a brief explanation of the method upon which our business is conducted, will be of interest.

This company confines its business *exclusively* to the manufacture of the crude or raw material, which is sold in rods, tubes and sheets to consumers to be made into the beautiful goods familiar throughout the civilized globe.

In many cases the company has granted exclusive licenses to others to use the material purchased from them in the manufacture of certain classes of articles, agreeing not to sell to anyone else for the purpose of making the same goods. This prevents undue confusion and competition, which would be apt to result in the production of a cheaper and inferior article. For instance, the CELLULOID BRUSH CO. is licensed to make brushes, combs, hand-mirrors, and certain other toilet articles; the CELLULOID NOVELTY CO. is licensed to make jewelry, collars and cuffs, and similar goods, and so on through many lines of manufacture in which CELLULOID has been found available, this being the case, it will be at once recognized that we are not at liberty to sell our material to strangers without first knowing to what use it is to be put.

Parties may feel perfectly at their ease in communicating to us the purposes for which they desire the material. As already stated, we do not and will not



make any of these articles ourselves, our only object being to sell the crude material to others, and to foster its introduction into new fields whenever we can. On the other hand, in many instances we can save parties considerable loss in time and money, by pointing out to them that others are working in the same line with themselves, or that the object in view is impracticable.

Like all successful inventions, our patents have been pirated to a certain extent, and imitations, under different names, have been sold, in some cases as CELLULOID, and in others under the representation that it was "*just the same as celluloid.*" Although such sales have been small, they have in some instances worked injury to both the public and ourselves. Persons deceived into thinking the inferior material CELLULOID soon found it defective, and they condemned our material without discovering their mistake. Our goods are all plainly stamped with our trade-mark, the word "CELLULOID," or, when that is impracticable, the card upon which they are mounted or the package in which they are put up is labeled. We earnestly request those who are seeking for our goods to note this fact, and to refuse to purchase such as are not so marked, or those that are marked with a different name. We are suing these infringers of our patents, and have recently recovered several judgments against them.

It would be impossible, in the scope of this little pamphlet, to give a complete list of all the articles



made from CELLULOID, but in the following will be found sketches by our principal licensees information respecting their goods; these will co an idea of the extent of their business, and we will prove useful and instructive to the reader.

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## NOTICE.

*Those persons who desire to purchase our goods and to avoid inferior Imitations, are respectfully requested to see that the word "CELLULOID" plainly stamped on each article, or on the package in which they are sold.*

*The word "CELLULOID" has been patented by us as our Trade Mark.*





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CELLULOID BRUSH CO.

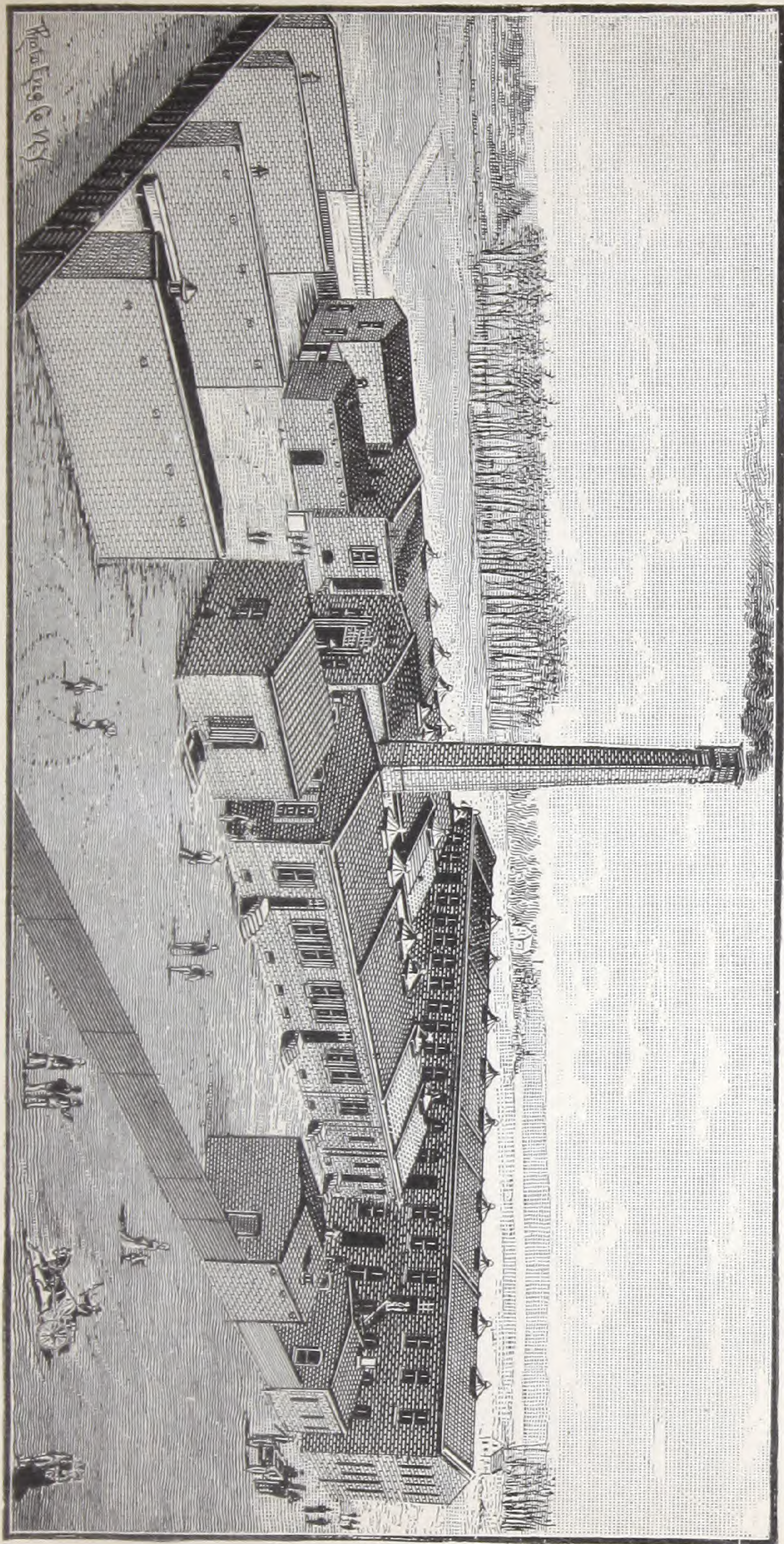
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**Halstead Brush Company**  
PHOTO ENGRAVING CO., N.Y.  
MANUFACTURERS  
**Brushes, Combs, & Hairpins**  
**Wholesale and Retail**  
**313 & 315 BROADWAY,**  
**NEW YORK.**



NEW YORK.





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## CELLULOID BRUSH COMPANY.



IMPORTANT uses have been found for Celluloid in the manufacture of brushes, combs and hand-errands. Its excellence for these toilet accessories is easily apparent. They are handsome in shape, beautiful in the purity of their color, and economical to their owner through their enduring qualities. Celluloid brushes never lose their backs from immersion in water, nor do combs break by falling. They may be scoured and cleansed without fear of warping, and they withstand the careless usage of children. In every way they are the best of their kind.

A brush is a simple looking affair, but it goes through many and complicated processes before it is finished. In one important respect a brush whose body is of Celluloid differs from common brushes. One may see by examination of any brush as ordinarily made, the holes in which the bristles are set are drilled in rows. The bristles are doubled, forming a loop, they are set in the holes, and a wire is passed through the loop to fasten them. If one end of a bristle be pulled the bristle may be drawn out around the wire. In a brush with Celluloid body all this is different. The largest brush made by the Celluloid



Brush Company has 400 holes, and no two of them are on the same angle. When the bristles are set in these holes they are not looped, but are of single length. The backing is then put on and heat is applied. The Celluloid softens, and the stiff ends of the bristles become imbedded in the back. When cooled they are securely anchored, and there is no pulling them out. They are a part of the body, and are beyond harm from water.

In the manufacture of combs the Brush Company has a capacity of nearly 10,000 per day. They are made plain, with "rope backs," in fancy shapes, and in imitation of coral, amber and other materials. Next to beauty, their indestructibility is their most remarkable quality. The hand-mirrors are of charming designs, and fit to grace the dressing table of the daintiest lady in the land. The glass is the best imported, and is received direct. It is minutely inspected, and the slightest imperfection is sufficient to condemn. So, too, with the brushes. The greatest care is exercised in the selection of the stock. Russian bristles of the best quality are bought in large quantity, and then carefully culled, bleached and inspected. It is the object of the Company to offer no goods but those which in their respective classes are superior to the productions of other makers. They think they can claim to do this, not only by skill and care in manufacture, but because as a material for their purposes Celluloid is incomparably better than any other.



CELLULOID NOVELTY CO.



OFFICE OF TRE

CELLULOID NOVELTY CO.

Sole Manufacturers of

JEWELRY · PEN · HOLDERS · & · NOVELTIES  
CUFFS · COLLARS · & · SHIRT · BOSOMS

W.S. SILLCOCKS  
PREST.  
C.L. BALCH  
VICE PREST.  
F.R. LEFFERTS  
SEC. Y. & TREAS.

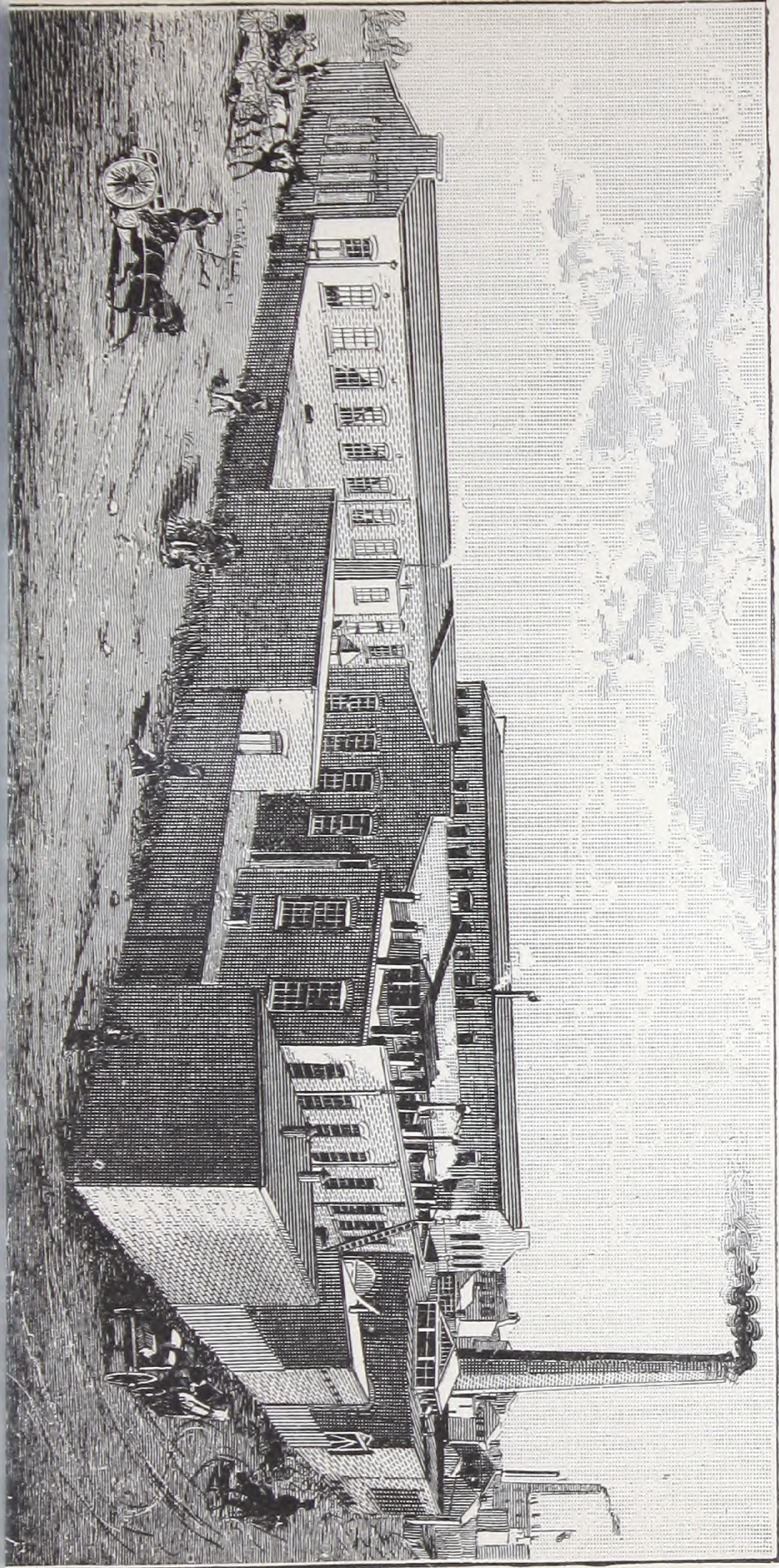


313 · & · 315 · Broadway

NEW YORK

PHOTO ENG CO. N.Y.











## CELLULOID NOVELTY COMPANY.



THE CELLULOID NOVELTY COMPANY is appropriately named. Of all the licensees of the parent company it manufactures the greatest variety of arti-

A catalogue would be needful to enumerate all their productions. Among which may be named following: Collars and cuffs, jewelry, corkscrews, cases, soap cases, powder boxes, pen racks, pen knives, thimbles, chessmen and checkers, restaurant checks, shoe hooks, shoe horns, napkin rings, e stretchers, mouth pieces for pipes, parasol, umbrella and cane handles, and a great variety of articles in special designs.

These goods are in close imitation of coral, ivory, white, tortoise shell, amber, turquoise, lapis lazuli, emerald and cornelian, with combinations in colors, to which there is no limit. The beauty of these products is not surpassed by the originals of which they are imitations. Even to the eye of the expert they appear as remarkably perfect specimens of the natural substances they supplant. Their superiority over the genuine articles they represent is marked in many respects, but especially in their moderate cost. A few dollars invested in Celluloid bijouterie equals in effect hundreds expended in the purchase of genuine pro-



ducts of nature, and the closest scrutiny can scarcely detect a difference.

Celluloid collars, cuffs and shirt bosoms constitute the largest line of goods manufactured by the Novelty Company. They have made their way, against strong opposition, the world over. The especial qualities which commend them are their exact resemblance to linen, their flexibility, their comfort to the wearer, and the ease with which they can be cleansed and renovated for immediate use. They are thoroughly waterproof, elastic and durable in wonderful degree. Their foundation is fine linen, coated with a smooth and glossy surface of the purest white Celluloid, and they are free from that exaggerated brilliancy of finish which made the enameled paper collars of former days so objectionable to persons of fastidious taste. These goods are especially suited for warm climates or summer heats, and by their use the discomfort and untidiness of wilted and soiled linen may be easily avoided.

The warerooms of the Celluloid Novelty Company are at Nos. 313 and 315 Broadway, New York. There one may see the diversity of uses to which Celluloid has been already adapted, and may imagine the possibilities in the future. There are corals that rival the bloom of morning, and ornaments that would have well become the loveliness of Hebe. As one sees all this one wonders how so much of beauty can lay hidden in the prosaic materials from which Celluloid is fashioned.



CELLULOID PIANO KEY CO.



**ELLULOID PIANO KEY CO.**  
**Limited.**

THE ELLULOID PIANO KEY CO. LIMITED  
 NEW YORK

HENRY HEINING, Agent  
 HENRY MORGENTHAU, Agent  
 JOHN FISHER, Agent

No. 11 West 14th St.  
 cor. Fifth Ave.



## CELLULOID PIANO KEY COMPANY.



FOR more than eight years this company has manufactured piano, organ and melodeon keys of celluloid. In that time they have made more than 1,000 sets, and as the sum of this large experience we say that for this purpose, "under all circumstances, Celluloid ivory is better than elephant ivory, and is speedily and surely supplanting it."

This is high praise, but is warranted by the facts. The objections to elephant ivory, noted in other departments of manufactures, exist in its use for piano keys, and they are all obviated by the employment of celluloid. True ivory will crack, it will warp, it will speedily wear, and it will quickly and easily become discolored by exposure or accidents. These are precisely the things that Celluloid does not do, and it is therefore a perfect substitute for true ivory, or is rather a vast improvement upon it.

Its introduction for this purpose was strenuously opposed, and still meets opposition, but its merits are becoming so well known that hostility serves only to tend its use. Improved methods of manufacture make the cost less and the excellence of the work better than when Celluloid keys were first offered in



the market. Then each key was separately faced. Now the entire key-board is overlaid with a single sheet of Celluloid, polished, and the keys sawed apart. Uniformity of work and of matching is thus accomplished by the undeviating hand of machinery.

To many persons who own pianos expense is a matter of prime consideration, and the fact that a Celluloid key-board costs about one-half one made of ivory would not influence them in the purchase of an instrument. But there are advantages in Celluloid other than its cheapness. A set of keys will outwear three or four sets of ivory, and throughout their life they retain unchanged their freshness and purity of white. Dampness does not injure them, and no heat to which a piano is ever exposed, save an actual fire, will harm them. They are elastic and pleasant to the touch, and the fidelity with which they are made to imitate natural ivory makes them indistinguishable from that material. By professional players, and by persons in constant practice, they are held in higher regard as possessing all the qualities essential to perfection.





CELLULOID HARNESS TRIMMING CO.

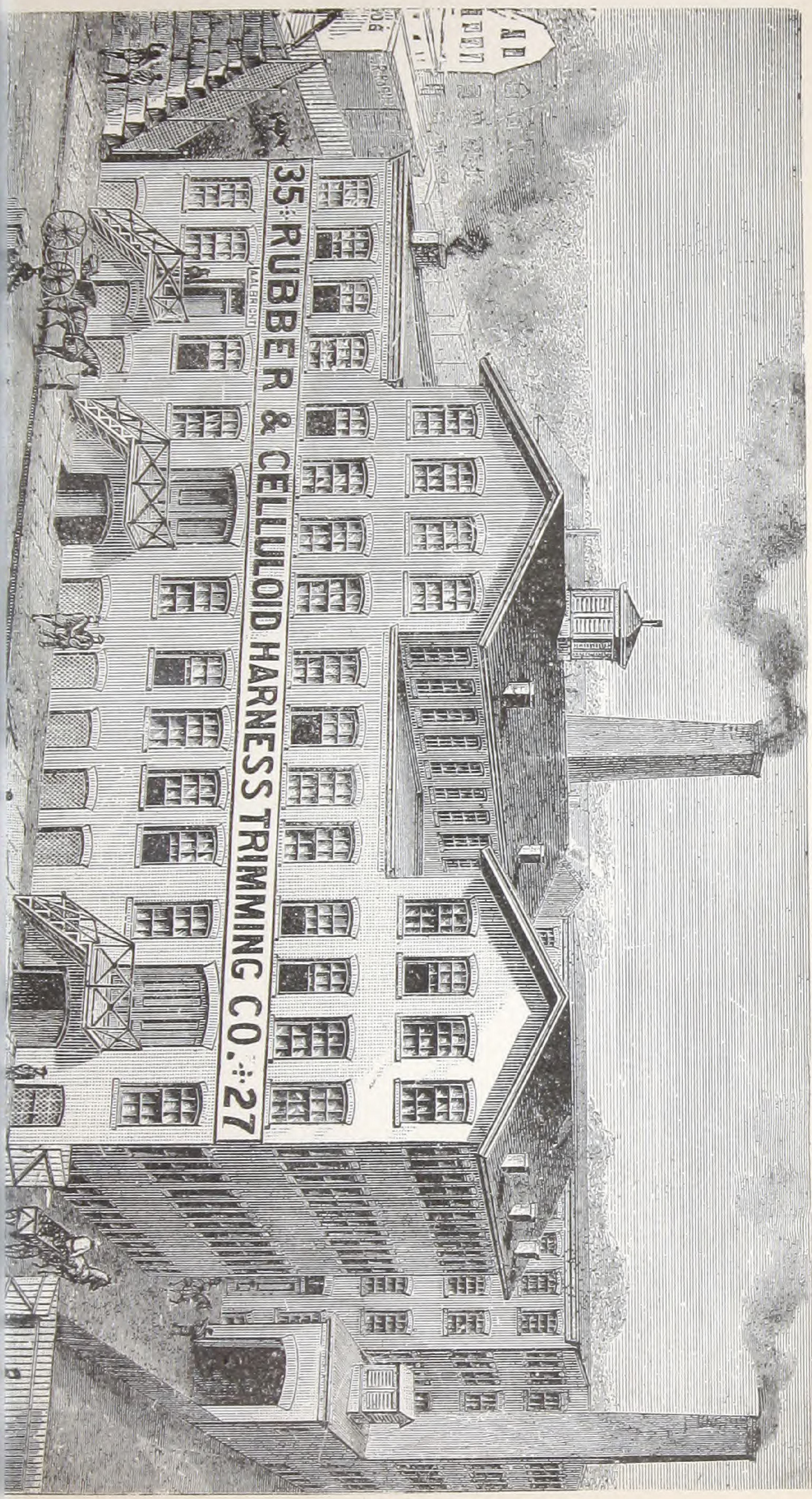




**R**UBBER & **C**ELLSULOID  
**H**ARNESS **T**RIMMING **C**O.  
Newark, N. J.

**E**xclusive Manufacturers of  
Rubber & Celluloid coated Harness  
Trimmins & Celluloid Martingale Rinp





35 RUBBER & CELLULOID HARNESS TRIMMING CO. 27


ALBRIGHT







## CELLULOID HARNESS TRIMMING CO.



CELLULOID could be put to no test that would more certainly expose its defects or reveal its merits than in its use for harness trimmings. Exposure to snow, to sleet, to rain, and to blistering suns, with the frequent washings essential to cleanliness, work quick ruin with patent leather and all other materials used for this purpose. Celluloid passes these ordeals unaffected, ever retains its freshness of appearance, and is bright as new when the service parts of the harness are worn out and cast aside. It is readily fashioned into handsome designs, through its plastic nature in the manufacturing processes, and gold or silver may be worked in the ornamentation without the metal tarnishing by sulphur contact—an annoyance inseparable from other mountings.

For these reasons the products of the Harness Trimming Company have been largely adopted by the trade, and their market is steadily enlarging. As a covering for harness, terrets and saddles, and as a material for martingale rings nothing equal to Celluloid is known. For the latter purpose it has almost superseded ivory, bone or metal, and the manufacture of these rings runs into the hundreds of thousands an-



nually. The Company keeps pace with the developing taste for richly ornamented harness by the production of new original designs, and by reproductions of the latest English and French styles. Many of the fashions now in favor abroad were first brought out by this Company, for it seeks to be an originator rather than an imitator. In its department of Celluloid work the Harness Trimming Company has been among the most successful adapters of the new material, and has afforded its patrons complete satisfaction.





CELLULOID LETTER CO.



THE CELLULOID LETTER  
COMPANY

32 LIBERTY ST. NEW YORK



Sole Manufacturers of

WHITE & COLORED LETTERS  
& NUMBERS FOR SIGNS

W. & A. G. CO. N. Y.



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ity in shape and a harmony of proportion in Celluloid letters that have never been attained in any letter material hitherto.

White letters have up to the present had the greatest demand, but of late there has been request for colors and fancy designs. This desire the Letter Company is prepared to fulfill, and it has added recently to its list many styles that are unique and attractive. Fine effects can be produced by combinations of white and colored letters, which can be multiplied to great numbers.

In addition to the use of these letters for window signs, they may be made of service in other ways. They are exceedingly pleasing when mounted on a colored plush base for indoor signs. They may be so fastened that when a sign has served its purpose the letters may be removed and again employed in the making of a new sign. With one or two alphabets the owner may vary his signs at will, without injury to the letters. They may also be attached to plate glass for swinging signs, or nailed or cemented to wood. Celluloid monograms, trade-marks and advertising devices are also among the specialties of the Letter Company.



CELLULOID STEREOTYPE CO.



M. L. JARBOX, PRES.

M. B. BARNES, TREAS.

C. P. GOLDEX, MAN'GR.

# The Celluloid Stereotype Co.

Sole Mfrs  
Celluloid  
Stereotype  
Plates  
and Type.

NOS. 82 & 84 FULTON ST.

NEW YORK.

ADVERTISING CUTS, FAC-SIMILES FOR  
PRINTING OF LACE, SILK<sup>OTHER</sup> AND TEXTILE FABRICS.

Photo Engr. Co., N. Y.



## CELLULOID STEREOTYPE CO.



CELLULOID for stereotype plates has but recently come into use. Where printing is done on cylinder presses, at high speed, durability and clear impression have not been hitherto combined in one material. The difficulty has been that metal plates soon became illegible, and to replace them involved large expense. In these respects Celluloid plates are much superior to metal. They give when new an equally sharp impression; when worn out, they can be replaced at much less cost, and where emergency demands haste they can be made in a fraction of the time required to put metal plates through the processes necessary to their production. One-half hour will suffice for casting and blocking a plate.

In newspaper advertising cuts the superiority of Celluloid is most clearly apparent. These are used in immense numbers by large advertisers, and nothing equals the new material in its adaptability to this purpose. The plates are light and convenient to handle. They are tough and elastic. Consequently they do not batter easily, like metal, and require no wrapping when sent through the mails. This advantage is important, both as to saving of time and material in wrapping, and saving of postage in transmission.



Economy in this particular amounts to a large sum where thousands of plates are distributed. They cost less than electrotypes, when the material used in their blocking, their superior finish and their durability is taken into the account. They take ink freely, and on cheap paper give a sharper impression than, with the care ordinarily used by pressmen, can be obtained from electrotypes.

For poster and large display type Celluloid is working a revolution in wood type manufacture. Every printer knows the vexatious labor necessary to thoroughly cleanse wood type after working it with colors. With Celluloid as a face this trouble disappears. A line may be worked in green or red, removed from the form, its face in a moment made as fresh as when new, and again immediately worked in another color. No time is lost in drying its surface, for it absorbs neither the lye, benzine or water. The Celluloid adheres closely to the grain of its wood base, enters into its fibre, and becomes a part of the block itself, rendering detachment impossible. The base is thus strengthened instead of being weakened by pins or screws, and this advantage is likewise one that pertains to the stereotype plates. Celluloid faced wood type are exceedingly durable, and are coming into general use by bag printers, where contact with hard or rough surfaced paper involves great wear. A font of this type will outwear three made from the best of wood, and it must speedily drive it from use.



CELLULOID EMERY WHEEL CO.



# CELLULOID EMERY WHEELS

MANUFACTURERS OF ALL KINDS OF  
CELLULOID · EMERY · & ·  
CORUNDUM WHEELS

FOR

MANUFACTURING PURPOSES

Office

228 MARKET STREET

NEWARK · N. J.

PHOTO ENG. CO. N.Y.



## CELLULOID EMERY WHEEL CO.



SOON after its discovery Celluloid was found admirably adapted for emery wheels, and the Celluloid Emery Wheel Company was licensed for their manufacture. Different kinds of grits were used for the cutting and grinding material, with Celluloid for the binding or adhesive base. Their introduction encountered difficulties, principally through reluctance on the part of grinders to discard their old and adopt a new wheel; but as the merits of the discovery became known through practical tests prejudices were overcome, and the success of the invention in this department of mechanics was acknowledged.

The wheels made by this company are beyond question the strongest and safest in the market. They are of different degrees of hardness, and in various shapes, to meet the requirements of the work in which they are to be employed. For cutting and slotting hardened steel or chilled iron no other wheels approach them in rapidity and smoothness of execution. They are likewise unexcelled for grinding small tools, for shaping and grinding small bits and cutters, and for cleaning out gearing. They carry a square and true corner, and will stand longer work than other wheels. With Celluloid for a base, it is possible to



make a thinner effective wheel than with any other material. Wheels  $\frac{1}{32}$  thick by six inches in diameter,  $\frac{1}{16}$  thick by 12 inches, and  $\frac{1}{8}$  thick by 20 inches give excellent service. A wheel  $\frac{1}{16}$  in thickness will eat its way through three inches of a file within four minutes, and show not the slightest traces of wear. A severer test than this could scarcely be demanded by the most exacting grinder.

Besides these points of excellence, the Celluloid emery wheels keep their thickness as no other wheels can, and never vary in their sides. They are the freest cutting in tool and knife grinding, and in saw gumming, for which uses corundum is employed as the cutting material. They never glaze if run at the proper speed, and will cut or grind the finest tool without drawing the temper. As a crowning excellence, Celluloid being impervious to moisture, these wheels can be run with water and suffer no injury.

The Celluloid Emery Wheel Company have many specialties enumerated in their catalogue. Among them are the thin wheels, or wheels with holes, and the manner in which wheels are fastened to iron plates. Also various tools adapted to the grinder's craft. The testimony of those who have given their wheels thorough trial is that they are incomparable for durability and quick performance of their work.



CELLULOID SHOW CASE CO.



CELLULOID · SHOW · CASE · CO.

Manufacturers · of ·

CELLULOID MOULDINGS

AND

WALL VENEERS

No · 17 · Maiden Lane · New York

FACTORY

229 · & · 231 · MULBERRY · ST · NEWARK · N · J ·

PRES.

R · A · JOHNSON

VICE · PRES.

J · S · COOLEY

TREAS.

C · K · COLBY

SUP · D · T.

C · W · COOLEY

PHOTO ENG. CO. N.Y.



## CELLULOID SHOW CASE CO.



IT is easy enough to see how handles, letters, combs and many other articles can be made of Celluloid, but when it comes to show cases one is at first puzzled to know where the utility of the material appears. The application of Celluloid to show case frames is among its most successful adaptations. It is also employed in picture frame mouldings, cornices and decorations.

The centre of these mouldings is of hard wood, which is covered, under great heat and pressure, with highly polished sheet Celluloid. This covering is sufficiently thick to last a life-time. Whether used indoors or exposed to the elements the veneer will never wear off nor lose its polish, and in these respects it differs from all other veneers.

Celluloid mouldings attract admiration and acknowledgment of their beauty. Their adamantine, mirror-like surface has never been equaled by any material applicable to like purposes. They display to excellent effect, and in their durability are peculiarly suited to the manufacture of show cases which are subjected to constant and hard usage.

Celluloid show cases may be adopted by those who wish first class goods, in the full confidence that they



will meet every requirement and that they will fulfill every guarantee made for them. They are the most beautiful as well as the most durable of cases. They are particularly adapted to display in the most attractive view the goods shown within them. They never require cleaning, for they never lose their polish. Celluloid mouldings which have been exposed for more than three years to the violence of winter storms and to the heats of summer retain to this day their original form and brilliant lustre. From the time of their introduction these cases have steadily increased in favor, as the public has come to appreciate the superiority of this material over all others employed in the manufacture of show cases. For confirmation of what is above said in their praise the Company confidently make reference to all who have used them.

In colors there are ebony with ebony or Scotch agate corner caps, tortoise shell or green agate with Scotch agate caps, and Scotch agate with green agate caps.

These cases received the medal at the Cincinnati Exposition of 1882.

These cases are not manufactured by the Show Case Company, but the mouldings are furnished to manufacturers in leading cities and cases may be had direct from them.



ALBANY BILLIARD BALL CO.





# ALBANY BILLIARD BALLS

... COMPANY ...

at Cor. Grand & Plain Streets

ALBANY N.Y.

## HATT PATENT STANDARD

CELLULOID

BILLIARD POOLS

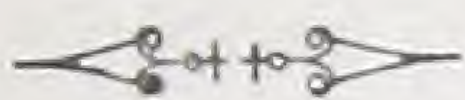
BAGATELLE BALLS



ST PHOTO. ENG. CO. N.Y.



## ALBANY BILLIARD BALL Co.



BESIDES its adaptability to strictly useful purposes, Celluloid contributes to the enjoyment of one of our most popular and healthful amusements. Within a quarter of a century the game of billiards has grown wonderfully in favor as a means of innocent recreation. To a multitude of people in sedentary occupations, or dwellers in cities, it is the only exercise at command, and in the homes of the well-to-do the billiard room is as much a part of the household economy as the dining apartment.

To thorough satisfaction in the game, as every player knows, a perfect set of billiard balls is indispensable. An absolutely true and perfect ivory billiard ball is almost an impossibility. Ivory is not of uniform density. That part of the tusk nearest the surface is closer in grain and heavier than the interior, and unless the ball be turned from a section cut from the centre, and surrounded uniformly by the denser outside, it cannot be made of equal balance—it must be what players term “lop-sided.” To test this point float an ivory ball in a cup of mercury, and it will be found that the same part invariably seeks the surface. No matter how often the experiment be repeated, the same side of the ball, if the expression may be per-



mitted, is always uppermost, proving conclusively that it is lighter than the section immersed. With such balls accurate play is impossible, especially in delicate shots.

The first billiard balls into whose composition Celluloid entered were more desirable than ivory chiefly in their less cost. They consisted of a centre surrounded by Celluloid, and this covering often cracked or chipped off. Improvements have remedied this defect, and the Hyatt billiard ball now made is in every respect better than any ball that can be turned from the tusk of the elephant. It is uniform in density from centre to circumference. One ball is likewise uniform with another ball in its elasticity, each being separately tested by fall from a fixed elevation. The degree of rebound is accurately noted, and such as fail to meet the standard are rejected. Celluloid balls are unaffected by sudden changes of temperature, they never become unbalanced, and on a level table may always be depended upon to "roll true." They retain their polish and brilliance of coloring, are more easily cleansed and resist effectually the discolorations which time gives to ivory balls. To these points of superiority over ivory is added the great difference in cost, and the sum of reasons is complete why Celluloid is fast supplanting the more costly but less reliable material.



E. C. PENFIELD & CO.



**E. PENFIELD & CO.**  
Manufacturers of  
**BRUSSES**  
SUPPORTERS, BRACES, ELASTIC STOCKINGS &c  
112 South Eighth St.,  
PHILA.

Penfield & Co. N.Y.





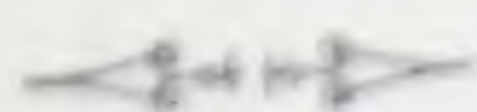
E. C. PENFIELD & CO. Philadelphia, Pa.







## E. C. PENFIELD & CO.—TRUSSES.



EVERY one who has worn a truss covered with leather or rubber well knows the discomforts and objections inseparable from those materials. Leather is quickly saturated with perspiration, it must be removed when its wearer bathes, is difficult to cleanse, its seams rip, its life is short and often attended with expense for repairs. Rubber gives off unpleasant odors under heat, when cold it must be warmed before it can with safety be made to conform to the body, it frequently irritates sensitive skin, and when cracked it protects the moisture that gains access to the steel beneath, and thus accelerates rust and destruction.

All these objections and annoyances vanish with a Celluloid covered truss. It has no seams to rip. It is impenetrable to moisture. It cannot absorb perspiration, and there is no necessity for its removal during the bath. It can be thoroughly cleansed in a moment with a damp sponge, or may be immersed in warm water with impunity. It emits no odors, and it adapts itself readily to the shape of its wearer. Rust is an impossibility, and in every respect it is the perfection of truss covering material.

Messrs. Penfield & Co. have had large experience



in the manufacture of mechanical appliances in the cure of diseases and injuries for which trusses are employed, and they regard Celluloid as beyond all question superior to any covering known. The best confirmation of their judgment is in their immense sales of Celluloid covered work, with no word of complaint and naught but the highest praise from its thousands of purchasers.

Messrs. Penfield & Co. have the exclusive use of many devices for the remedy of all forms of disease where trusses are required. Their pads are of so many shapes, sizes, and so attached, as to meet the peculiar features of each case under treatment. If none of the standard patterns are adapted to a case of extreme peculiarity, they can meet the emergency by specially devised apparatus, or by modifications of the trusses usually employed. Their experience and facilities enable them to satisfy any possible demands of this nature.





SPENCER OPTICAL MANUFACTURING CO.



SPENCER OPTICAL MFG. CO.

Manufacturers of

CELLULOID

SPECTACLES & EYE-GLASSES

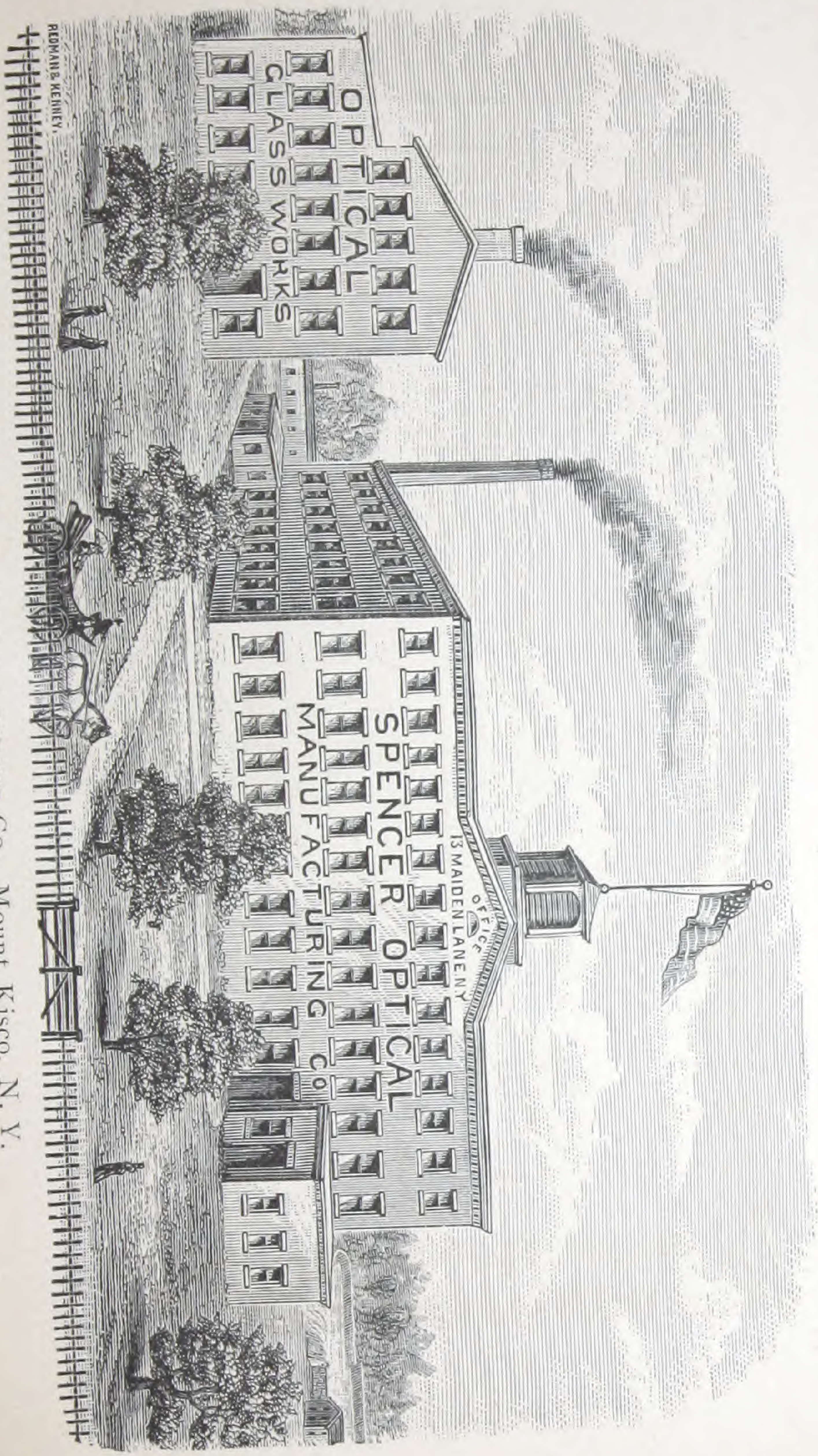
Salesroom

Maiden Lane

NEW YORK

PHOTO ENG. CO. N.Y. FACTORIES \* MT. KISCO. N.Y.





ROMAN & KENNEY,

SPENCER OPTICAL MANUFACTURING CO., Mount Kisco, N. Y.







SPENCER  
OPTICAL MANUFACTURING CO.



SINCE 1876 Celluloid has been used by this Company for the rims of eye-glasses. It has been found to combine many advantages for this purpose. It is lighter than rubber, horn, shell, or any other of the materials formerly employed. The rims are stronger and more durable than others. For beauty they surpass the ordinary tortoise shell, rubber and steel frames. They are not affected by atmospheric changes, and stand equally well in hot or cold climates. They do not corrode by moisture, and are not tarnished by exposure to the fumes of acids. Consequently they may be constantly worn in many kinds of employment where frames or rims of other material soon become discolored and unsightly.

Their durability and lightness are chief among these excellences. Although their first cost is a trifle above that of rims made from rubber, they are cheaper in the end, for they are almost indestructible. The number of eye-glasses yearly broken through carelessness in handling and from being permitted to drop upon floors is almost incredible. It is well nigh impossible to break a Celluloid rim unless by violence purposely applied, and where economy is an object a



rim of this material would be cheaper to the purchaser than any other commonly used, even if its cost were twice or thrice that at which it is offered.

The factories of this Company are at Mt. Kisco, N. Y., where nearly one-half million eye-glasses and spectacles are annually made. At the Centennial Exhibition, at the American Institute of 1879, and in numerous competitions throughout the country, the Spencer products have received high awards for superiority in all points of excellence. Their catalogue embraces glasses in every degree of quality, of great variety in styles, and of extreme range in prices. They can fill every requirement in their department of an exceedingly useful art, and their manufactures have won their way to nearly every corner of the globe.





MERIDEN CUTLERY CO.



**Freiden Cutlery Co.**



**FREIDEN COGN.**

**Office**

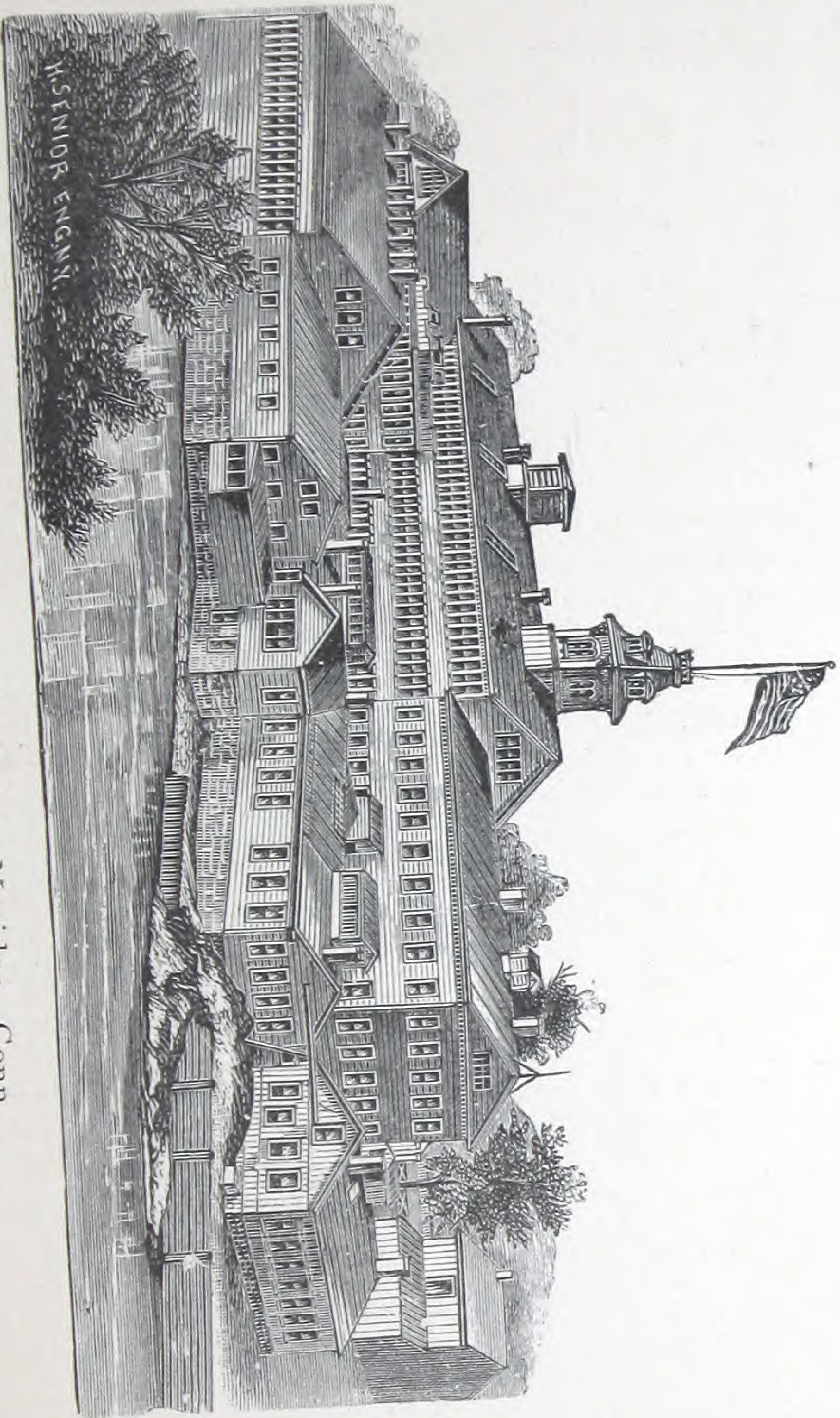
**49 CHAMBERS ST.,**

**NEW YORK.**



Freiden Cutlery Co., N.Y.





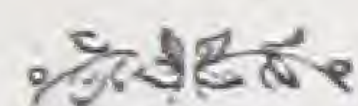
MERIDEN CUTLERY COMPANY, Meriden, Conn.







# MERIDEN CUTLERY COMPANY.



CELLULOID is a perfect substitute for ivory in all uses to which that material has been hitherto applied in the manufacture of cutlery. A handsome set of table ware in ivory is desirable, and is a possession in which every housekeeper of taste may take pardonable pride. Its expense has been the obstacle that placed it out of reach of persons whose means compelled economy, and that difficulty constantly increased as ivory became scarcer in supply and dearer in value. Besides its costliness there were other objections to ivory-handled cutlery. With age came yellow tints and discolorations, while carelessness or immersion in hot water loosened blades and shattered handles. It was beautiful when new, but unsightly when old.

For purposes of table cutlery Celluloid is more than a substitute for ivory. It is in every respect its superior. No other material has ever so fully met the requirements of the manufacturer or the needs of the purchaser. Its cost to the maker in crude form is far below that of ivory, it is more easily worked and molded to desired shapes, and consequently the producer is enabled to furnish the consumer with the finished ware at prices impossible where ivory is the ma-



terial employed. Where blades and forks are set in ivory the handles are the perishable parts. Where Celluloid is used, the rule of wear and tear is reversed, and the handles have longer life than the steel. Plunging in hot water does not loosen them, blows nor falls crack them, nor acids leave indelible stains. They are easily cleaned, the close grain of the material preventing adhesion of dirt, and they are in use practically indestructible. In appearance the imitation is a perfect reproduction of genuine ivory.

The Meriden Cutlery Company, of Meriden, Conn., were the first manufacturers of table cutlery on this side the Atlantic, and now use Celluloid as a material for the handles of table ware. The raw Celluloid, as received from the manufacturing company, is cut into the shapes required for the various styles, the blades are inserted, and the goods in the rough are laid by for a seasoning of several months. When time enough has elapsed to thoroughly accomplish this end, the turning, polishing and ornamentation are perfected, embracing many processes. Their cutlery is made either plated or unplated, plating on steel being a specialty on which particular care is bestowed. The blades of all their ware are equal to imported goods of like grades, while the handles are far superior to those fashioned from any other material. To the consumer the cost is but about one-half that of service mounted in ivory.



JOHN B. OELKERS.



Wm. B. Oelkers

MANUFACTURER  
OF

VARIETY GOODS



FROM CELLULOID



Mechanic Street

NEWARK

\*N.J.\*

SPECIALTIES

\* CARRIAGE TRIMMINGS \*

WHIP HANDLES \* PENCIL CASES

PHOTO-ENG. CO. N.Y.



## J. B. OELKERS—FANCY GOODS.



PRIOR to 1875, Mr. John B. Oelkers, of Newark, had been for seven years engaged in manufacturing goods from ivory, bone, horn, rubber and various kinds of woods. When Celluloid came to his knowledge he saw its superiority over the materials he had been using, and gradually substituted it in their stead, until it is now the foundation of his business.

His line of production embraces many staple articles—among them, coach trimmings, whip handles, pencil cases, and handles for ale pumps. Celluloid coach trimmings have made their way to high favor with builders and owners of first class work, and those who have had most experience with them would on no consideration return to the use of either ivory or hard rubber. Ivory cracks and changes color, while the sulphur in rubber tarnishes gold or silver plating. Celluloid is free from both these objections, and is much more easily cleaned than any material hitherto employed in coach ornamentation. Hence the preference given it for such uses. For coach work plain ivory imitation, dark blue, dark brown and dark green are the standard colors, although any color or tint desired will be furnished to order. As handles for ale pumps, Celluloid is used in the fittings of the most costly public

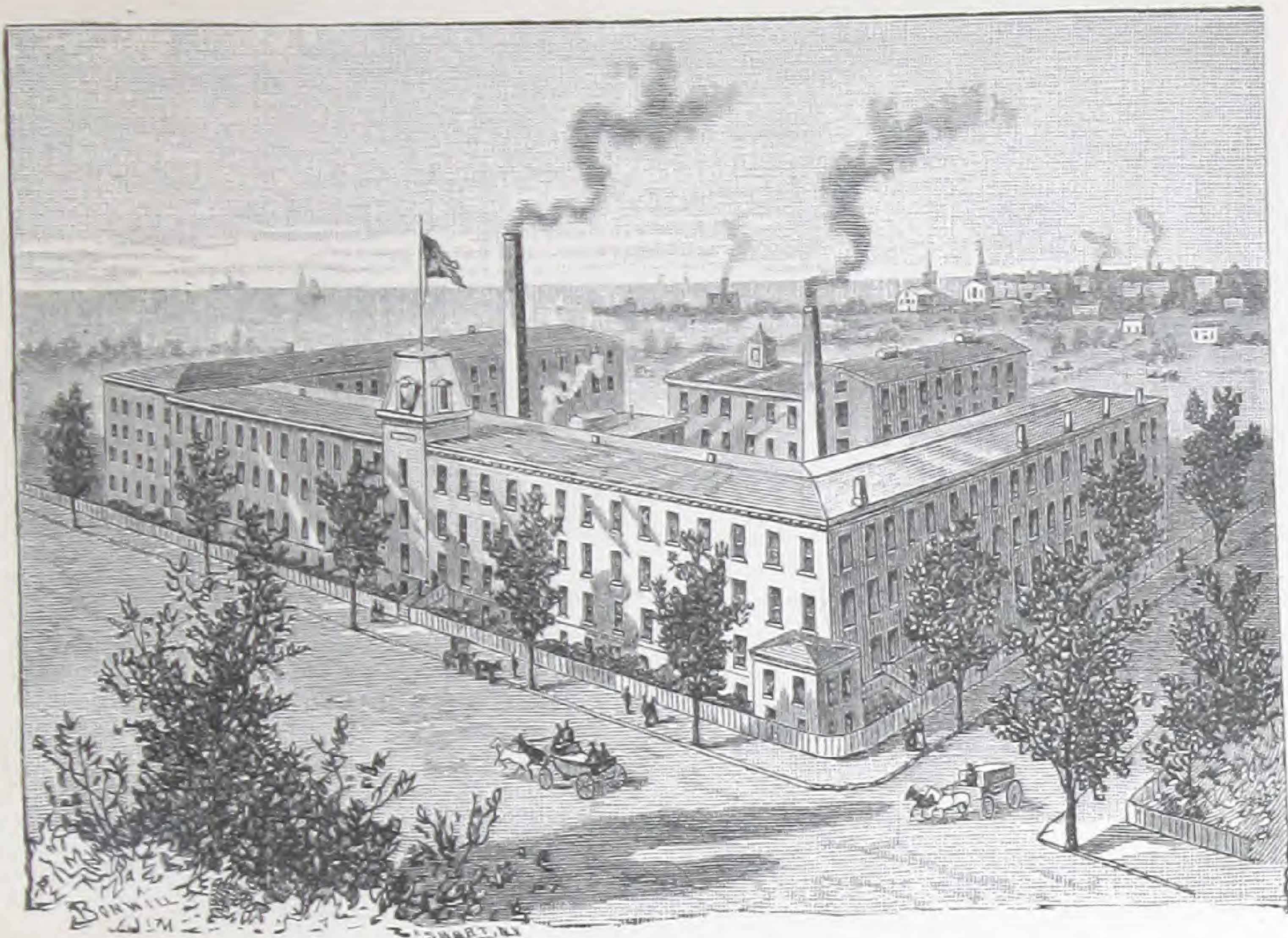


houses in New York city, on account of its cleanliness, its durability and its unchangeableness of appearance.

In addition to staple articles, Mr. Oelkers does a vast quantity of work in specialties and on individual orders. Recently he has turned out in great numbers castors and skate rollers. These are made with box-wood centres and Celluloid rims and sides. They are much more durable than those made of solid wood, and are less destructive to floors and carpets. On a special order he manufactured 300,000 Celluloid watch cases within three months, and completed his contract with a week to spare of the time specified. He solicits correspondence with persons who have recent patents to which they think Celluloid might be adapted, and invites them to forward him a model or sketch by which he may judge how far Celluloid may be made available in the production of their specialties. The whims of fashion change the style and shape of many trifles for which Celluloid would be an admirable material, and in such cases he would be glad to furnish samples from designs, give information as to the availability of Celluloid for the uses proposed, or enter into contract for manufacture. All correspondence of this nature will be regarded as confidential. In short, he will undertake any kind of Celluloid work for which the right has not been already granted to others by the parent company. His factory is Nos. 24 and 26 Mechanic Street, Newark, in the heart of the city, and convenient of access from all lines of railway.



# WARNER BROTHERS



SOLE MANUFACTURERS OF  
**CELLULOID**  
COVERED CORSET CLASPS  
AND  
SIDE AND DRESS STEELS.

ALSO OF  
**THE CORALINE CORSET.**

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Factory, at Bridgeport, Connecticut.

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OFFICE, 353 BROADWAY, NEW YORK.



## WARNER BROTHERS.



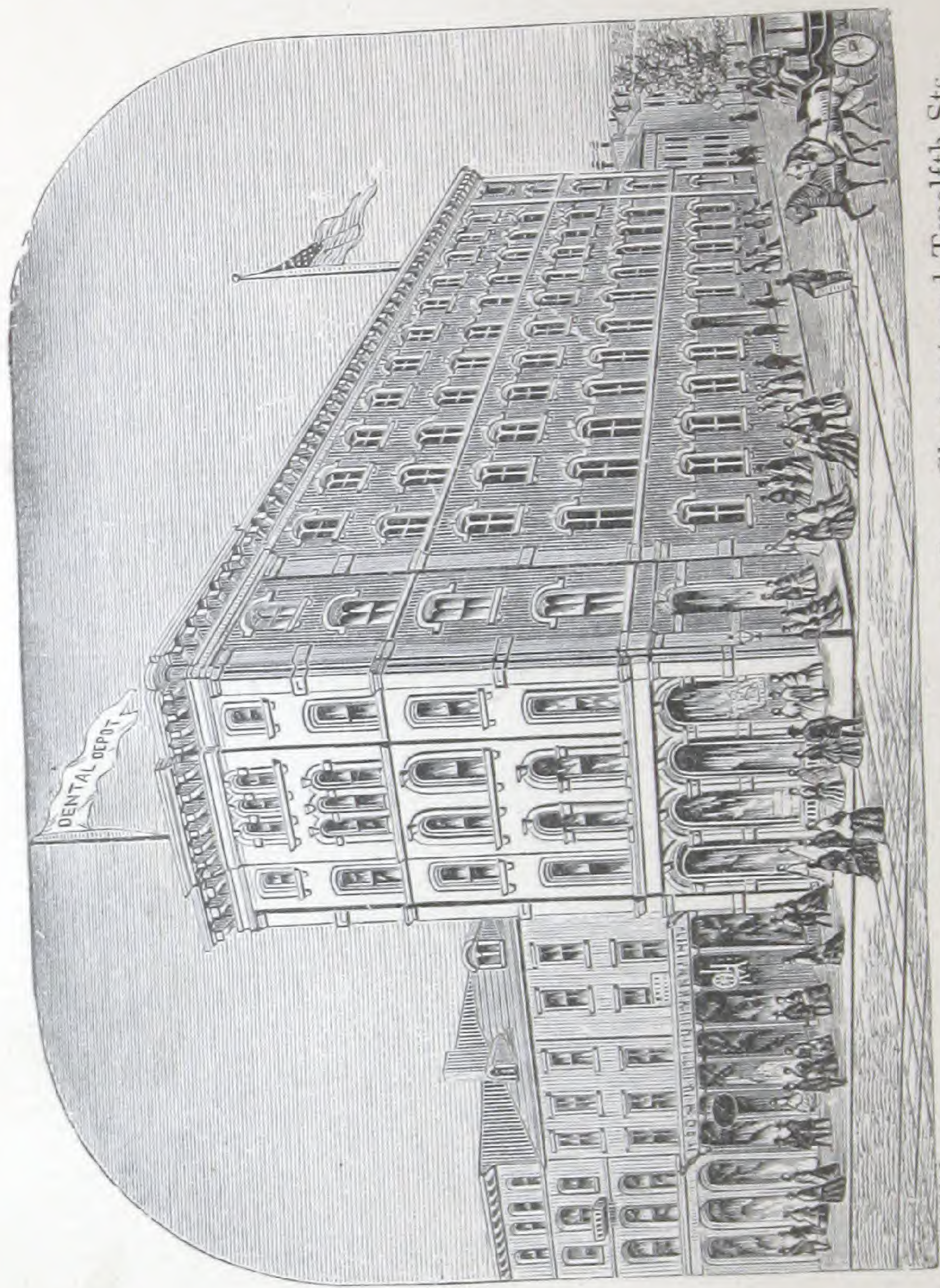
**W**ARNER BROS. are now engaged in the manufacture of corsets, dress steels, corset clasps and side steels. As a covering for the metal portions of corsets they have found Celluloid superior to other materials. Celluloid dress steels are preferred by the best dressmakers as a substitute for whalebone, for they are smoother and more elastic. The Celluloid protects the steels thoroughly from rust, and as it is itself even more elastic than the steels, it never cracks nor peels from its foundation.

Their corset clasp and side steels are made from the finest quality of clock spring steel, thickly covered with Celluloid. They are impenetrable to moisture, and cannot corrode. Every steel thus protected is warranted by them not to rust. As another advantage from this non-corrosive quality, the steels need not be removed from the corset when it goes to the laundry. In point of cleanliness, and easy conformation to the shape of the wearer, celluloid covered steels are an improvement on all others.



S. S. WHITE  
DENTAL MANUFACTURING COMPANY.





S. S. WHITE DENTAL MANUFACTURING CO., Chestnut and Twelfth Sts.,  
Philadelphia, Pa.



S. S. WHITE  
DENTAL MANUFACTURING CO.



AS a base for artificial teeth Celluloid has in large degree superseded hard rubber and metals. The reasons for the preference given the new material are many. The dentist who has thoroughly mastered the manipulation of Celluloid knows that he can depend upon it; that it is uniform and will respond unvaryingly to his skill in effecting his purposes. It is easy to work and mold into shape. The perfection of the work and the satisfaction it gives its wearers adds to the reputation and professional success of those dentists who use it. Where accidents occur repairs are quickly and cheaply made. It is pleasant to handle in all stages of manipulation, and thus makes the operator's task agreeable in comparison with the working of other materials. Intense heat is not necessary in its molding, and much discomfort is thereby avoided. It is in every respect to the dentist a far better material than was known before its invention.

To the wearer of artificial teeth the excellences of Celluloid are most important. It is much stronger and tougher than rubber. Plates can therefore be made much thinner and lighter. This obviates all sensations of heaviness and conduces much to com-




fort. Rubber plates contain sulphur and vermilion, in such quantities that they often cause irritation or positive disease in sensitive mouths. Celluloid is absolutely free from such objections. Rubber, to imitate the color of gums and mouth, contains from 30 to 40 per cent. of pigments. This large proportion is needful, because the dark shade of the rubber itself must be overcome. As manufactured for dental plates, but one part of vermilion to 400 parts of Celluloid is required to give a tint in exact semblance of nature. Celluloid is unaffected by acids or alkalies. There is, therefore, never chemical or galvanic action to remind the wearer that his mouth holds a miniature battery. The plates are easily cleansed, for they present such smooth surfaces that foreign substances do not form close adhesions. They will not crack by variations of temperature or exposure, and might with safety remain over night in freezing water. They retain their color unchanged. They are less expensive in first outlay, cost less for repairs, and outwear plates of any other material.

These reasons, briefly stated, explain the high esteem in which Celluloid is held by dental practitioners and wearers who use plates of which it forms the body. Its excellences have not been overdrawn, and those who best know its advantages will speak many things in its praise which cannot here be noted.



DENISON BROTHERS.





**DENISON BROTHERS**

DEEP RIVER \* CONN \*  
MANUFACTURERS OF  
PATENT STRAIGHT BEVELS AND  
OBLIQUE FACED ORGAN STOP KNOBS



DENISON BROS.  
ORGAN STOP KNOBS.



DENISON BROS., of Deep River Conn., have been long engaged in the manufacture of straight, beveled and oblique-faced organ stop knobs. These knobs were usually faced with ivory until the introduction of Celluloid, but the Messrs. Denison have found the new material so much superior to the old that they give it preference, and consume large quantities in their work. All faces made by them are secured to the knobs by their patent tenon or flange. This device makes it impossible for the faces to loosen. They are also sole owners of the patents for beveled and oblique-faced knobs. The facility with which the names on these stops can be read by the performer is a most important consideration, especially in the execution of rapid musical passages involving frequent changes in stop combinations. Their list of stop names is already large, but is constantly increasing. Ivory faces are furnished when desired, and engraving to special designs will be executed.

Denison Bros. have endeavored to establish a character for unvarying excellence and reliability, and their ready adoption of Celluloid is proof that they are quick to see and make their own any invention that can contribute to the perfection of their art.















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